ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

PRELIMINARY ASSESSMENT

EXECUTIVE SUMMARY

TO: Alan Altur, U.S. EPA
FROM: James Sugarman, FIT
DATE: September 27, 1991
SUBJECT: Chicago Department of Streets and Sanitation
103rd Street and Doty Avenue Site
ILD981194699/F05-9104-009/FIL0432PAA

The Chicago Department of Streets and Sanitation 103rd Street and Doty Avenue site is an active sewage sludge drying and disposal facility located between Doty and Stony Island avenues, Cook County, Chicago, Illinois. The site has been used for sewage sludge drying and disposal since 1978. Municipal landfill operations were conducted at the site from approximately 1965 to 1978. The 37-acre site is owned by the Chicago Port Authority and is currently operated by the Metropolitan Water Reclamation District of Greater Chicago (MWRD). Located approximately 1500 feet south of the site are the banks of Lake Calumet.

Original closure operations for the landfill were conducted in 1985. These operations allowed for continued sewer sludge drying and disposal. At this time, analysis of monitoring well and sludge samples by MWRD indicated the presence of heavy metals.

In May 1989, MWRD discovered severe runoff problems from the landfill. Leachate streams were observed flowing off-site across Stoney Island Avenue and into the wetlands east of the site. Analysis of samples collected from this leachate indicated the presence of heavy metals. Additional closure procedures were undertaken in summer 1990, including the application of clay to seal the berms, and the installation of clay, ductile iron, and concrete pipe to carry liquids to city

sewers. File information contains no record indicating the presence of a liner at the site.

In March 1991, construction on an improvement project immediately east of the site was halted when leachate effused from the bottom of a ditch being trenched. Samples collected from the ditch by the Illinois Environmental Protection Agency Emergency Response Unit indicated contamination with ammonia and filterable residues.

During the FIT off-site reconnaissance conducted on June 18, 1991, erosion paths were observed in the berms surrounding the site. These paths led to drainage ditches containing water. The ditches drained to adjacent wetlands and to Lake Calumet, located south of the site, providing a direct route for potential contaminants to enter the surface water.

The majority of residents in the area receive drinking water from municipal systems drawing from Lake Michigan. No surface water pathway exists from the site to Lake Michigan. A potential exists for potential contaminants to migrate to groundwater; however, the nearest groundwater users are approximately 59 persons located approximately 3 1/2 miles from the site. Surficial glacial deposits in the area consist of approximately 10 feet of loose soil followed by 60 feet of clay. The private wells draw from bedrock consisting of Silurian dolomite just below the clay.

The site is surrounded by berms, fences, and gates that make access difficult. Persons who could come in contact with contaminants from the site include on-site workers as well as individuals who may come in contact with liquid in off-site drainage ditches.

The site is well vegetated and no release of contaminants by windblown particulates is suspected. Additionally, FIT found no documentation of detection of volatile compounds which could contribute to an air release.

7390:1